

Parabolas
#6

$$y = \frac{1}{10} x^2$$

Vertex: $(0, 0)$

$$(0, 0 + \frac{1}{4}(\frac{1}{10}))$$

$$(0, 0 + \frac{1}{40})$$

$$(0, 0 + \frac{5}{2})$$

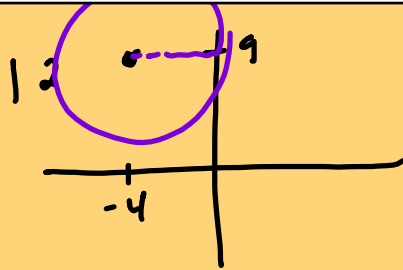
$$(0, 2.5)$$

2.5 in.

Vertex (h, K)

Focus: $(h, K + \frac{1}{4a})$

Assignment
is worth 15 pts.



tangent to y-axis

$r=4$ center $(-4, 9)$

$$(x+4)^2 + (y-9)^2 = 16$$

13/ $r = 9.3 \times 10^7$ miles
center $(0, 0)$

$$(x-0)^2 + (y-0)^2 = (9.3 \times 10^7)^2$$

$$x^2 + y^2 = 8.649 \times 10^5$$